

## MATERIAL SAFETY DATA SHEET

### 1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**Trade Name** IM-H Hardener  
**Version Number** 1  
**MSDS Number** 007  
**Distributor** Imtran  
39 Shelley Road  
Haverhill, MA 01835 USA

**Telephone Numbers - 24 Hour Emergency Assistance**  
Emergency (800) 424-9300

**Telephone Numbers - General Assistance**  
Information (978) 372-3443

### 2 COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient Name      | CAS Number | Concentration | Exposure Limits / Health Hazards   |
|----------------------|------------|---------------|--|
| TOLUENE DIISOCYANATE | 26471-62-5 | 0.5 %         | ACGIH TLV: .005 ppm STEL:<br>.02ppm<br>OSHA TWA: .005ppm STEL:<br>.02ppm |
| N-BUTYL ACETATE      | 123-86-4   | 30 - 35 %     | Other Exposure Limits: 200ppm  |

### 3 HAZARDS IDENTIFICATION

#### Emergency Overview

NI

#### Signs & Symptoms of Short-Term (Acute) Exposure

Excessive vapor concentration in air, especially in confined spaces, may cause asphyxiation. Excessive inhalation of vapors can cause nasal, throat and respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Eye contact causes irritation, redness, tearing, blurred vision. Eye contact with liquid or vapor causes severe irritation, redness, tearing, blurred vision. Vapors may cause severe eye irritation, redness, tearing and blurred vision. Prolonged skin contact may lead to extraction of natural oils with resultant dry skin, cracking, irritation and dermatitis. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Notice: intentional misuse by deliberately concentrating and inhaling the contents maybe harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

#### Effects of Long-Term (Chronic) Exposure

Health studies have shown that many solvents pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids and vapors should be minimized. Prolonged or continuous inhalation of vapors may result in delayed lung damage. Repeated or prolonged inhalation of vapor may cause liver and kidney damage. Repeated inhalation of vapor in high concentration can change the blood picture.

### 4 FIRST AID MEASURES

#### Skin

Wash with soap and water.

**Eye**

Flush with water for at least 15 minutes, consult a physician.

**Inhalation**

Move to fresh air. Give artificial respiration if necessary.

**Ingestion**

Do not induce vomiting. Do not drink water, milk or oil. Consult physician or poison control center immediately. Treat symptomatically.

**Medical Conditions Aggravated by Exposure**

ND

## 5 FIRE FIGHTING MEASURES

**Extinguishing Media**

Chemical powder, carbonic acid - co 2, foam.

**Basic Fire Fighting Procedures**

Water spray may be ineffective. For extinguishing larger fires or inside buildings, a self-contained breathing apparatus is recommended to protect firefighters from any hazardous combustion products.

**Unusual Fire & Explosion Hazards**

Water may be used to cool endangered containers. Keep containers tightly closed.

**Flash Point** 31 C

**Flammability Limits in Air, Lower, % by Volume** 0.8

## 6 ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedure**

Take up with liquid-binding materials, such as vermiculite. Take the material in closed containers to the responsible authority for elimination.

## 7 HANDLING & STORAGE

**Handling**

Keep container tightly closed.

**Storage**

Do not store above +50C. Store containers away from heat in a cool ventilated place. Do not smoke.

**Ventilation**

Local exhaust: yes special: eliminate all ignition sources.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Eye Protection: Personal Protection Equipments (PPE)**

Use safety glasses designed to protect against splash of liquids.

**General**

Eye bath and shower should be available. Use chemical resistant clothing. Liquid may penetrate shoes and leather causing delayed irritation.

## 9 PHYSICAL & CHEMICAL PROPERTIES

### Odor and Appearance

Clear, light yellow liquid w/odor of organic solvents

|                            |                                       |
|----------------------------|---------------------------------------|
| <b>Boiling Point</b>       | 124 C                                 |
| <b>Specific Gravity</b>    | 1.16                                  |
| <b>Melting Point</b>       | NI                                    |
| <b>Percent Volatile</b>    | 29.9 By volume / 2.87 lbs. per gallon |
| <b>Vapor Pressure</b>      | 13 (mm Hg.) hPa                       |
| <b>Vapor Density</b>       | < 1                                   |
| <b>Solubility In Water</b> | Not soluble                           |

## 10 STABILITY & REACTIVITY

### Stability/Incompatibility

Stable Avoid peroxides and other strong oxidizing materials.

### Hazardous Reactions/Decomposition Products

Carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### Hazardous Polymerization

Will not occur.

## 11 TOXICOLOGICAL INFORMATION

### Routes of Exposure

Inhalation, skin, eyes and ingestion.

## 12 ECOLOGICAL INFORMATION

## 13 DISPOSAL CONSIDERATIONS

### Waste Disposal

Incinerate in an approved facility, do not incinerate closed containers. Dispose of in accordance with federal, state, and local pollution control requirements.

## 14 TRANSPORT INFORMATION

### Department of Transportation (DOT) Requirements:

#### General Transportation Information for Bulk Shipments

|                      |                  |            |      |
|----------------------|------------------|------------|------|
| Proper Shipping Name | Paint Related    | UN/NA Code | 1263 |
| Hazard Class         | 3                |            |      |
| Packaging Group      | Class III        |            |      |
| Labels Required      | Flammable Liquid |            |      |

## 15 REGULATORY INFORMATION

### NFPA Ratings

|        |              |            |                 |
|--------|--------------|------------|-----------------|
| Health | Flammability | Reactivity | Special Hazards |
|--------|--------------|------------|-----------------|

### HMIS Ratings

|          |                |              |                         |
|----------|----------------|--------------|-------------------------|
| Health 1 | Flammability 3 | Reactivity 1 | Personal Prot. Equip. C |
|----------|----------------|--------------|-------------------------|

## 16 OTHER INFORMATION

### Disclaimer

The information and recommendations contained herein are believed to be reliable and accurate based on the data available to ITW Imtran. However, we make no warranty, expressed or implied, regarding the accuracy of this data or the results obtained from the use of this product.

**Completed On** 11/18/02

**Completed By** Chris Sobaszek